

Angell (Geo. T.)

Cattle Transportation in the United States.

AN ESSAY.

By GEO. T. ANGELL,

President of the Massachusetts Society for the Prevention of Cruelty to Animals.



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OFFICE OF THE SOCIETY, BOSTON, March, 1872.

We have been and are making special efforts to change the transportation of animals in this country. For this purpose, Mr. Angell has written the following Essay upon the subject, which we intend to put before every member of Congress, and, so far as possible, before the members of State Legislatures, City Governments, Railway Corporations and Boards of Health. It contains matter of public interest which we think, every citizen should read. We hope that editors throughout the country will aid us by giving it a place in their columns, with such editorial notices as may call attention to it.

FRANK B. FAY, *Secretary.*

CATTLE TRANSPORTATION IN THE UNITED STATES.

THE BRIGHTON BUTCHER.

On the 16th of April, 1871, George E. Temple, a Brighton butcher, died, as appears from the verdict of the coroner's jury, of "blood poison, inoculated in dressing for market a dead ox, one-half the meat of which was sent into Boston for sale." On the 20th of April a joint special committee of the aldermen and common council of Boston was appointed "to ascertain whether unwholesome meats were sold in that city, and what legislation was necessary to protect the public health."

From the report of that committee, dated September 19th, 1871, it appears that within a circuit of twenty miles from the State House, a population of over 650,000 people is supplied largely with meats brought a distance of from five hundred to twenty-five hundred miles, and that the cattle supplied are mainly from the Western States and Texas.

HOW THE CATTLE COME.

It further appears that those from Texas are shipped to New Orleans, from thence by boats up the Mississippi to Cairo, thence by rail to Tolono, Illinois, and thence to Chicago and Eastern cities; or they are driven in herds from the interior of Texas to Red River, and transported thence by boats and cars. Large numbers also are driven in herds from Texas to Abilene, Kansas, and thence transported in cars.

All authorities agree that the transportation of these animals is attended with great suffering to the animals from want of food, water and rest; also from overcrowding, and the crowding of smaller animals under the larger in the same cars; so that many of them die in transit, many more become diseased, and on all there is a large percentage of loss of weight.

Between Indianola, Texas, and New Orleans, they are carried on steamers, under deck, in crowded condition, with poor ventilation, four and five days, and sometimes more, without food or water. In one case mentioned in the report, out of one hundred and fifty cattle shipped about forty died on the passage.

Dr Mannheim, of the Chicago Board of Health, writes from Texas in December, 1869, as follows:—"I would be astonished to find Texas cattle in good condition upon their arriving at their places of destination. The manner in which they are crowded on shipboard and cars, after being exhausted by hurried journeys over the immense prairies of Texas, necessarily develops any latent germs of disease, and may cause disease in the healthiest cattle. For instance, thousands are shipped to New Orleans from Indianola, and Lavacca, a journey of from three to six days,

during which they receive neither food nor water. At New Orleans they are transferred to boats for Cairo, and thence by rail to Tolono, Illinois. During the entire trip they have food and water but about three times. Other herds are driven from the interior of Texas to Red River, Louisiana, and thence shipped to Cairo. *By this route the treatment is no better.*"

A gentleman at Chicago, familiar with the Texas cattle trade says, "that cattle going down the Red River, and up the Mississippi, to Cairo, are a week, or more, on the way; and generally without much food or water; that usually five or six dead are thrown overboard each morning, and he had known forty to fifty thrown over at one time."

Another gentleman, familiar with the Chicago stock-yards, says, "that many animals die on the cars before reaching that point." "That he had seen about forty lying there in one pile."

The Chicago stock reporter says: "There is great cruelty in transportation." "Cars are terribly overcrowded, and animals are carried great distances without food or water. The result is, that they are taken out at Chicago with bruises and sores, and legs and horns broken; many of them dead, and more almost dead; and sometimes cattle and hogs, and sometimes cattle and sheep, are packed in the same car, which results in the smaller animals being trampled upon by the larger."

At Chicago animals are driven, or (if unable to walk) taken from the cars, and fed, watered and rested a few hours. They are then re-loaded for the East in the following manner:—"The men employed to drive them into the cars are armed with saplings weighing often from eight to ten pounds, with sharp spikes, or goads, at the end. They rush upon the cattle, yelling, swearing and punching them with these spikes often twenty, thirty or forty times, taking little care to avoid the eyes. Eighteen to twenty cattle are thus forced into thirty-foot cars, giving less than two feet space to the animal, and not unfrequently smaller animals—calves, sheep and swine—are crowded under them. In this way they are often carried for days without food, water, or possibility of lying down." And it appears, from various authorities, that this same system of loading and transportation prevails over the United States, *as a rule*; times of confinement and starvation varying of course with distances; cattle dealers hiring a car for a round sum, and forcing all the animals into it they can.

MASSACHUSETTS REPORTS.

The Boston committee report that "from ninety to one hundred calves are usually crowded into a single

car." "That two hundred hogs or sheep is about the average," and that "animals are fed only twice between Chicago and Boston, and only three times between Kansas and Boston."

As the result of this transportation, it appears that many are taken out dead, and many more "panting, fevered and unfit to kill." Many of these animals are badly bruised, and some have ulcers.

A Boston gentleman, who has carefully investigated the subject of cattle transportation from the West to our Eastern cities, visiting, as he says, all places of importance where he could gain information in regard to it, writes that large numbers of cattle are trampled to death on the cars; that larger numbers at the end of these long routes "come reeling and tumbling out of the cars as though blind or intoxicated;" that these dead and diseased animals are dressed and sold in the markets, the carcasses sometimes "full of dark-stained holes," made by the goads used in loading. He saw, in cold weather, carloads of sheep without their fleeces, shivering with the cold. He was told by the editor of the "Live Stock Journal" that he had known a whole train of diseased sheep shipped to Albany and there slaughtered for the market; that large numbers of hogs die in transportation for the want of water. This gentleman states that he found the shrinkage of cattle on long routes to vary from fifty to two hundred pounds, and that the Assistant-Superintendent of the Great Western Railroad, at Hamilton, told him that he had known "the shrinkage to be as high as one hundred and eighty pounds to the animal, between Chicago and Suspension Bridge."

The Massachusetts Railroad Commissioners, on page thirty-one of their report of January, 1871, say "that the shrinkage between Chicago and Boston is estimated to be from ten to fifteen per cent.," and they add, "cattle trains yield the road to most others, and pass hours on sidings; the animals are without any food or water, and often with insufficient ventilation in summer, or shelter in winter; they are jolted off their legs, and then goaded till they struggle up, for they cannot be permitted to lie down; they thus arrive at their destination, trampled upon, torn by each other's horns, bruised, bleeding; having, in fact, suffered all that animals can suffer and live. Under the most favorable circumstances they leave the train panting, fevered, and unfit to kill; under the least favorable, a regular percentage of dead animals is hauled out of the cars."

LOSS IN WEIGHT, ETC.

Professor Horsford, in an official report on the subject of furnishing live cattle to the United States army, during the late war, says that "cattle weighing fifteen hundred pounds on the hoof at Chicago, are estimated to lose two hundred pounds of dressed meat by transportation in cars to Boston." Last year 194 head of cattle were shipped from Brigham Young's farm in Utah to Chicago, and it was chronicled in the Chicago papers as a remarkable fact "that in riding fifteen hundred miles the shrinkage was only two hundred and ten pounds a head."

It was estimated, at the Social Science Convention held in Albany in 1869, "that Texas cattle, which then cost about one hundred dollars in New York markets, could, if properly transported, be sold in those markets at about forty dollars."

One Boston firm, engaged in tanning "Brighton hides," say there is a loss of more than twenty-five thousand dollars per annum on hides tanned by them, by reason of bad transportation. Another Boston firm puts the loss, from the same cause, on hides tanned by them at about eighteen thousand dollars.

The Massachusetts Railroad Commissioners, in their report of 1871, page 30, say that "the whole system of cattle transportation in the United States, as at present conducted, is an outrage on the first principles of humanity."

SANITARY REPORTS AND INSPECTION.

The Cattle Commissioners of New York say, in their Report of 1869: "There was revealed to the Commissioners such an amount of reckless barbarity toward animals, and of criminal indifference to the public health on the part of many who furnish meat to consumers, that one almost wonders how the city has escaped a pestilence."

The Massachusetts State Board of Health, in their report for 1872, just published, page 242, speak of "the horrible treatment which animals now so often receive on railroads," also "of the dressing for the markets of the animals arriving dead, and of those killed to save them from a speedy death by disease."

Dr. Derby, of that Board, in letter dated August 21, 1871, and published in the Report of the Boston Committee, page 22, says:—"It is notorious in Brighton, that many animals are killed to save them from speedy death by exhaustion or disease."

It would seem to be clear, then, that the present forms of transporting animals result (1st), in suffering and disease to the animals, and (2d), in great loss of weight and value.

The next question to be examined is one of vital importance to the public health, viz.:—Whether the flesh of diseased animals is fit for human food?

There would seem to be no question as to this matter in the minds of the physicians, and boards of health of European Continental cities, inasmuch as in a large portion, if not all the large cities of Continental Europe, no meat is permitted to be sold that has not been previously inspected and approved by health officers. In some cities, like Paris, and Venice, all animals are required to be killed in one abattoir; in others, like Munich, they are not required to be killed at one abattoir, but must be inspected and approved; and this inspection in many, if not all cases, is of the animals before they are killed, and of their flesh after killing.

The Jews, the world over, so far as I am informed, eat the meat of no animal that has not been examined and approved by their rabbi, both before and after killing.

In Great Britain, Parliament has passed laws authorizing the inspection and condemnation of meats, but I do not think they have been generally enforced.

From an article in "The Dublin Quarterly," written by Professor Charles A. Cameron, I learn that they have recently commenced a rigid inspection of meats in the city of Dublin, and that in 1870 the health officers condemned in that city 388,380 pounds of animal food. The Professor writes, "I may safely state that the citizens of Dublin are now almost perfectly certain to get the flesh of sound animals in every

butcher's shop in the city." He adds that many cases of sickness from eating the meats of diseased animals have come to his knowledge. He also speaks of the serious effects resulting from drinking the milk of diseased animals. In the case of pigs he states that he has evidence of several of these animals dying in consequence of being fed upon the milk of diseased cows.

Professor Gamgee states that several cases of illness from eating the flesh of diseased animals have come to his knowledge.

Dr. Livingstone says that in South Africa, negroes and others eating the flesh of animals attacked by pleuro-pneumonia suffer from a malignant disease.

The registrar-general of Scotland states that carbuncular diseases have greatly increased since pleuro-pneumonia became epidemic amongst the cattle. The same has been found in England.

The health officer of the board of health of Chicago, in February, 1871, reported that "nearly one-half of all the beef, pork and mutton offered for sale in that city was damaged, and poor from disease, and unfit for food."

Professor E. A. Parkes, in his "Practical Hygiene," says: "We should conclude from general principles that all diseases must effect the composition of flesh, and as the composition of our bodies is inextricably blended with the composition of the food and substances we eat, it must be of the greatest importance to health to have the substances as pure as possible."

Professor Agassiz says: "Let me call your attention to the dangers arising from the ill treatment of beef cattle before slaughtering them."

Medical Inspector Hamlin, in his "Notes on the Alimentation of Armies," says: "The flesh of mammalia undergoes great change, by reason of fasting, disturbance of sleep, and long continued suffering, resulting in its not only becoming worthless, but deleterious."

The Cattle Commissioners of New York, in their report of 1869, say: "By the 8th of August, 1868, it became apparent to the Metropolitan Board of Health, in New York city, that the alarming increase of obstinate and fatal diarrhoea in the Metropolitan District, was caused by the use of diseased meats."

The Massachusetts Railroad Commissioners, in their report of 1871, say: "At present, food (animal) tainted in the course of transportation, is brought into Massachusetts, and endangers the health of the people."

Doctors Henry G. Clark, R. M. Hodges, Henry I. Bowditch, (Chairman of the Massachusetts State Board of Health), and Dr. S. A. Green, City Physician of Boston, all gave to the Boston Committee opinions in regard to the injurious effects upon the public health, of the present system of supplying the markets.

The Massachusetts State Board of Health, in their report of January, 1871, say that meat taken from diseased cattle should be condemned, and no meat should be put into the markets without thorough inspection.

I will add that in 1866 it was found in New York that hogs were killed by feeding upon the blood and entrails of animals diseased by transportation, although they will fatten on the same material taken from healthy animals; and, in point, is the case of the

Brighton butcher, before referred to, who died from blood poison, inoculated in dressing one of these animals for market.

HOW CAN TRANSPORTATION BE IMPROVED?

If then it appears that present forms of animal transportation are attended,

First. With suffering and disease to the animals transported.

Second. With great loss of weight and value. And

Third. With greater or less danger to the public health; then the important question to be determined is, *How can these forms of transportation be improved?*

So far as steam vessels are concerned, it is quite certain that many animals are brought safely across the Atlantic, and it would seem to follow that the same degree of care used on steamers transporting animals along the Gulf and up the Mississippi might be attended with equally favorable results.

Of course the animals must have food, water, rest and proper ventilation, and on the Gulf protection from the motion of the vessel; for this latter purpose stalls with padded sides, also strong belts of leather or canvas slung under cattle have been suggested.

In Great Britain all places on vessels used for transporting animals are required to be divided into pens not exceeding fifteen feet in length by nine in breadth; the floors must have proper battens or foot-holds; they must be ventilated by suitable *separate* inlet and outlet openings; and there are various other regulations as to animals being provided with food and water.

Of course these regulations would require the carrying of a less number of animals with greater care and at a higher cost. But aside from the general suffering of the animals and the consequent disease and loss of weight and value, it is hardly possible that any form of transportation can be more costly than that which requires forty cattle, out of a hundred and fifty, to be thrown overboard between Indianola and New Orleans, and five or six more per day between New Orleans and Cairo.

But the greater and more important question is: How to improve the transportation of animals on railways?

REFRIGERATOR CARS.

A few years since, a "refrigerator car," so called, was invented, which has been somewhat in use since that time. It is claimed that in that car the meats of animals slaughtered in Chicago can be brought in good condition to eastern cities. In the New York "Times" of November, 1866, I find an estimate signed by Mr. Bergh of New York, that to transport thirty-two steers, weighing say 20,000 pounds, from Indianapolis to New York, with the average shrinkage (supposing none of them die), cost at that time about \$1,210, while to transport the dressed meat of the same animals in a "refrigerator car" would cost only about \$100—making over \$1,100 difference in the cost of the meat at New York.

There can be no doubt that it would be much cheaper to bring dressed meat from Chicago to the East than to bring living animals, and much better for the animals to be saved a thousand miles of *pres-*

ent transportation. But the question which at once suggests itself is, What security have we that animals slaughtered in Chicago were in good condition there? What security that we may not be eating the meats of diseased animals, which because they could not be brought further alive, were slaughtered there?

DISEASED MEAT.

The New York State Cattle Commissioners, in their Report of 1869, say that "it is absolutely necessary that cattle should be inspected both upon the hoof and also their internal organs while being dressed for market, because unwholesome beef and other meats are constantly thrown upon the market so prepared and disguised that detection is almost impossible."

Professor Cameron says that "the flesh of oxen in the congestive stage of pleuro-pneumonia cannot be distinguished from that of healthy oxen."

The Board of Health of Chicago, in their Report published in 1871, page 202, speaking of the Texas cattle fever say: "As a general rule, it was found impossible to decide by the appearance of the carcass, after the viscera had been removed, whether it was fit for market or not."

Dr. Derby, of the Massachusetts Board of Health, says, in letter before referred to: "The recognition of diseased meat is not easy for either physicians or butchers; probable guesses may be made in some cases, but there can be no approach to certainty in the recognition of the meat of animals which had been sick at the time of killing or which have been brought to the slaughter-house dead."

Horace W. Jordan, member of the Brighton Board of Health, also one of the Mass. State Cattle Commissioners, testifies before the Boston Committee (see their Report, page 26 of Evidence) as follows:

"I think it would be an excellent thing if the public could know what comes from Chicago. The public are imposed upon by meat from Chicago, and I think they will be more. At Chicago, all the poor cattle, bulls, stags and everything disagreeable are picked up, &c. This is what you get from Chicago." And he adds, that when the meat is examined here, it is almost impossible to tell whether the animal was diseased.

All these matters should be considered in connection with the refrigerator car.

LEGAL REMEDIES.

Another method of meeting this question consists in procuring the enactment of laws to prohibit railway companies from overcrowding their cattle cars, and to compel them to stop these cars at certain intervals of time, unload the animals and give them several hours for food, water and rest. Laws of this kind have been enacted in several of the States, and a bill of similar import passed the United States House of Representatives last winter, and is now before Congress. When public opinion on the subject shall become sufficiently strong, these laws may be enforced, but there is always a difficulty at first in compelling great monied corporations to do what they are not inclined to.

And there are objections to this frequent unloading and reloading of animals. It is attended with more or less suffering to the animals. It exposes them to

the danger of contagious diseases. In the resting yards stronger animals are likely to get more than their share of the food. It involves long delays, a longer investment and insurance to the shippers or consignees, and to the railway companies a larger rolling stock, more cattle yards and employes, with higher rates for transportation.

The greatest advantage to be gained by the enactment and enforcement of such laws, would be, as I believe, that they would compel railway corporations to immediately adopt some one of the stock cars now invented, in which animals can be carried long distances without unloading, having food, water and rest, and coming out at the end of a thousand miles of travel in almost if not quite as good condition as at the point of departure.

IMPROVED STOCK CARS.

Five such inventions have recently appeared; two in England and three in this country.

The first English invention was by W. Reid, of Granton, and has been tried with success. A description and drawing of it can be found in the London "Engineer" of November 19, 1869, and in the London "Animal World" of December, 1869. The second was invented by Mr. Welch, of Southall, near London. A drawing and description of this will be found in the "Engineer" of April 15, 1870, and the "Animal World" of July, 1870.

The first American invention was patented, I think, in 1867, by J. H. Aldrich of Massachusetts; the second by John W. Street, of Marshalltown, Iowa, and the third has been very recently invented and patented by S. W. Remer, Superintendent of the Car Company's Works, at Taunton, Mass. A description of all these inventions may be found in "Our Dumb Animals" (printed at Boston), numbers of July, 1869, December, 1870 and March, 1872.

Differing in details, all these inventions agree in the general principle of separating the animals by partitions, or stalls, movable, or otherwise, in such manner as to prevent crowding, and in giving them a full supply of food and water. They may be described as movable stables, carrying a somewhat less number of animals, with a much higher degree of care. Three of them and perhaps all, are so changeable, that cattle may be carried one way and merchandise the other; and I think that all of them can, without great expense, be adapted to cattle cars now in use.

Mr. Remer's invention is but just patented; but the car invented by Mr. Street, has been several months in use and has proved itself, as I am informed, a success. The Chicago "Tribune" of October 16, 1871, speaking of its third trip to New York, says that "it was loaded in thirteen minutes; that it saves on stock sent by it three days time (stoppages), sixty pounds shrinkage per head, all losses by trampling and crowding; the services of two men, something on feeding, and that it will revolutionize the business of stock carrying."

In a pamphlet on "cattle shipping by railway in the United States," by the President of the Company organized for manufacturing these cars, he states that the cattle come out at the end of the route, "fresh as from a stable, and that on shrinkage

ne, saying nothing of other matters, there is a saving on every carload, of over \$100.

As these cars can be used for transporting animals one way and merchandise the other, I think there can be no doubt that it is for the interest of Railway Companies to adopt them, because since a less number of animals can be carried in a car, more cars will be required to carry them and the business and profits of carrying them will be thereby increased; while, paradoxical as it may seem, *the same, or a less number of cars will do the work*, because on each trip, several days time now required for stoppages, will be saved.

Besides, there will be no expense of unloading and re-loading at way stations, or for rent of extra cattle yards, and *the risk of contagious diseases will be greatly lessened*.

It is for the interest of shippers and consignees, as well as railway companies to have these cars adopted, because the saving of animals that now die on the passage, and of the large shrinkage on those that get through alive, and of the damage to their hides, saying nothing of interest and insurance, will much more than cover the increased cost of transportation, and therefore meats can be sold here at lower prices, which will tend to increase their consumption and the business of carrying them.

It is not impossible even, that the estimate made at the Social Science Convention, at Albany, in 1869, and before referred to, may prove correct, viz., *"that Texas cattle, which then cost nearly \$100 in New York, could, with proper transportation, be sold there at about \$40."*

It is of course, for the interest of consumers to have these cars adopted, because it is for their interest to have wholesome meats at lower prices.

SAVING EFFECTED.

The saving to be effected by these cars can be easily seen by the following figures: In 1869, *Chicago alone*, shipped to eastern cities 294,717 cattle. The Massachusetts Railroad Commissioners, in their report of 1869, say that the average shrinkage between Chicago and Boston, is estimated at ten to fifteen per cent. (Professor Horsford puts it as high as twenty per cent.). *Call it ten per cent.* and the cattle to average, *at the point of departure*, one thousand pounds each, there would be one hundred pounds shrinkage to the animal, and the loss *this side of Chicago, by shrinkage alone*, amounts to 29,471,700 pounds of beef. Add to this the shrinkage on cattle shipped from St. Louis, Cincinnati, Tolono and other points; add shrinkage on calves, sheep and swine (of which in New York City alone, nearly two millions are consumed annually); add also all shrinkage between Kansas and the western cities before named; add loss on animals which die on the cars, also loss of value by reason of their becoming diseased, also the damage to hides as before stated, *and we shall begin to get some idea of the tremendous cost of present forms of transportation.*

It seems to me then entirely clear, that the cattle transportation of this country *must be changed*; and that the sooner the change is brought about the better it will be for the interests of all concerned.

HOW IS THIS TO BE DONE?

I answer, laws should be enacted, even though we may not be able at first, to effectively enforce them,—laws to regulate the number of animals, and manner of carrying them on sea-going and other vessels and steamers,—to prohibit, as they do in England, the transportation of sheep in cold weather, without their fleeces, and the transportation of poultry in ways which cause suffocation,—to stop this crowding of cattle cars, so that *as on German and French cattle trains*, animals may be carried standing quietly, side by side, tied to the lattice-work of the cars, and without those jerks in starting and stopping, *so characteristic of American impatience*, and, *as every engineer knows*, so unnecessary and easily avoided. And then there should be laws, that animals in transportation must be properly fed and watered, and have rest, either on the cars or by more frequent unloading at way stations; and that calves, *which now receive no nourishment from the time they are taken from their mothers, during three or more days, until they are killed*, shall be fed, *as they are in Europe*, with suitable food.

All these laws would be useful, just in proportion as public opinion should compel their enforcement.

But, in my judgment, the change of animal transportation in this country is to be *chiefly* effected:

First, by informing and arousing public opinion, and carrying information upon the subject to the various persons and corporations specially interested; and second, by the enactment and enforcement of stringent laws (*upon the necessity of which all will agree*), for the careful inspection of all animals slaughtered in the neighborhood of our large cities, and of all meats while being dressed for market, and before they are offered for sale.

When it becomes as impossible here, as in continental European cities, to sell the meats of diseased animals, every precaution will be taken to bring animals to market in good condition. When the Christian inspector here shall exercise the same care as the Jewish rabbi, the Christian will eat as good meat as the Jew. When the Boards of Health of our Eastern cities shall condemn over three hundred thousand pounds of animal food in a single year, as the Dublin Board of Health did in 1870, animal transportation in this country will be changed, and we shall be able to say here, as Professor Cameron said there, that *"the citizens are now almost perfectly certain to get the flesh of sound animals in every butcher's shop in the city."*

I have prepared the foregoing essay with the earnest hope that it may hasten a change of Animal Transportation in this country. I have treated of the financial and sanitary questions involved, but let me add, there are other considerations of higher import, which ask that a *Christian Pulpit and Press* and the voice of a humane people shall demand that these dumb creatures be protected from cruelties, which it is hardly in the power of language to adequately describe.

GEO. T. ANGELL.

MARCH, 1872.

